

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A reactant material dispensing system wherein at least two components are combined, comprising:

a metering system that pressurizes the at least two components;

a flow meter that measures a volume of a component passing within;

a flexible conduit fluidly connected between the metering ram and the flow meter;

a mixing chamber that receives the at least two components under pressure, the mixing chamber being disposed proximate a robot; and

a nozzle through which a mixture of the at least two components flows.

2. (currently amended) The dispensing system of claim 1 wherein the two components are a catalyst and a base and wherein the mixture forms used to form a seal in on an article of manufacture.

3. (currently amended) The dispensing system of claim 1 wherein the metering system further comprises a first metering ram that pressurizes ~~the~~ a catalyst and a second metering ram that pressurizes ~~the~~ a base.

4. (currently amended) The dispensing system of claim 1 wherein the metering system includes a supply, a metering ram fluidly connected to the supply, and a shutoff valve ~~is~~ located between ~~a~~ the supply and the metering ram.

5. (currently amended) The dispensing system of claim 1 wherein the metering system further comprises a first shutoff valve ~~is~~ located between a catalyst supply and ~~the~~ a metering ram and a second shutoff valve ~~is~~ located between a base supply and the metering ram.

6. (currently amended) The dispensing system of claim ± 7 wherein the mixing chamber and first and second flow meters are disposed proximate ~~is connected to a~~ movable ~~robot~~ arm of the robot.

7. (currently amended) The dispensing system of claim 1 wherein a first flow meter is located between a first rigid conduit and the mixing chamber and a second flow meter is located between a second rigid conduit and the mixing chamber.

8. (original) The dispensing system of claim 1 wherein a gun valve is located between the flow meter and the mixing chamber.

9. (currently amended) The dispensing system of claim ± 7 wherein a first gun valve is located between the first flow meter and the mixing chamber and a second gun valve is located between the second flow meter and the mixing chamber.

10. (original) The dispensing system of claim 1 wherein a pressure sensor is located between the metering system and the nozzle.

11. (currently amended) The dispensing system of claim ± 7 wherein a first pressure transducer is located between the first flow meter and the nozzle and a second pressure transducer is located between the second flow meter and the nozzle.

12. (new) A system for dispensing a reactant mixture, comprising:
a base supply and a catalyst supply for providing a base and a catalyst, respectively;
a metering ram for injecting the base and catalyst, the metering ram being coupled to the base supply by a base supply conduit and to the catalyst supply by a catalyst supply conduit;

base and catalyst flow meters for measuring a characteristic of the base and catalyst flowing therethrough, the base and catalyst flow meters being coupled to the metering ram by a flexible base conduit and a flexible catalyst conduit, respectively; and

a mixing chamber coupled to the base and catalyst flow meters by base and catalyst junction conduits, respectively, the mixing chamber being attached to a robot;

wherein the base and junction conduits are configured to resist expansion so that characteristics of the base and catalyst measured by the base and catalyst flowmeters are provided to the mixing chamber.

13. (new) The system of claim 12 wherein the base and catalyst supply conduits are flexible.

14. (new) The system of claim 12 wherein the base and catalyst supply conduits further comprise base and catalyst shutoff valves, respectively, the base and catalyst shutoff valves being adapted to control the flow of the base and catalyst to the metering ram.

15. (new) The system of claim 12 wherein the base and catalyst junction conduits further comprise base and catalyst valves, respectively.

16. (new) The system of claim 15 wherein the base and catalyst junction conduits further comprise base and catalyst pressure sensors, respectively, the base pressure sensor being disposed between the base valve and the mixing chamber and the catalyst pressure sensor being disposed between the catalyst valve and the mixing chamber.

17. (new) The system of claim 12 wherein the metering ram is disposed apart from the robot.

18. (new) The system of claim 12 wherein the flexible base and catalyst conduits flex to permit the mixing chamber to be moveably positioned with respect to the base and catalyst supplies.

19. (new) The system of claim 12 wherein the mixing chamber, base and catalyst junction conduits, and base and catalyst flow meters are disposed proximate the robot.

20. (new) A system for dispensing a reactant mixture, comprising:
a robot having a moveable arm;
a base supply and a catalyst supply for providing a base and a catalyst, respectively, the base and catalyst supplies being disposed apart from the robot;
a metering ram disposed apart from the robot for injecting the base and catalyst, the metering ram being coupled to the base supply by a flexible base supply conduit and to the catalyst supply by a flexible catalyst supply conduit, the flexible base and supply conduits having base and catalyst shutoff valves for inhibiting base and catalyst from flowing from the metering ram to the base and catalyst supplies, respectively;
base and catalyst flow meters for measuring a characteristic of the base and catalyst flowing therethrough, the base and catalyst flow meters being coupled to the metering ram by a flexible base conduit and a flexible catalyst conduit, respectively; and
a mixing chamber coupled to the base and catalyst flow meters by rigid base and junction conduits, respectively, the mixing chamber being attached to the moveable robot arm and having a removable nozzle for dispensing a reactant mixture formed in the mixing chamber; and
a base valve disposed in the rigid base conduit between the base flow meter and the mixing chamber and a catalyst valve disposed in the rigid catalyst conduit between the catalyst flow meter and the mixing chamber;
wherein the rigid base and junction conduits are configured to resist expansion so that desired amounts of the base and the catalyst are provided to the mixing chamber to form the reactant mixture.